sub a) added 9/87

Patent Claims

1. Go-kart drive assembly with an internal combustion engine in the form of a reciprocating- piston or rotary-piston engine as the power source, and with spur-type reduction gearing (26) between the internal combustion engine and a rear-wheel drive shaft (6) of the go-kart, characterized in that the gearing (26) is accommodated within a common housing (10) with the crank shaft (17) of the reciprocating-piston engine or with the engine shaft (17a) of the rotary-piston engine; in that the space(s) (a, b) between the shafts of the gear wheels (27, 29; 30, 33) that make up the gearing is/are fixed and invariable within the housing (10); and in that the driving pinion (27) of the gearing (26) is arranged on the crank shaft (17) or the engine shaft (17a), and the driven pinion (33) of the gearing (26) is arranged on the rear-wheel drive shaft (6).

2. Drive assembly as defined in Claim 1, characterized in that the common housing (10) is a closed structure.

3. Drive assembly as defined in Claim 1 or Claim 2, characterized in that the driving gear wheel (27) of the gearing (26) is installed on the crank shaft (17) or engine shaft (17a) so as to be able to rotate and connected to the crank shaft (17) or engine shaft (17a) through a coupling (28).

4. Drive assembly as defined in Claim 3, characterized in that the coupling (28) is a centrifugal clutch .

5. Drive assembly as defined in one of the Claims 1 to 4, characterized in that the rear-wheel drive shaft (6) is installed in the common housing (10) so as to be able to rotate.

6. Drive assembly as defined in Claim 5, characterized in that the driven gear wheel (33) of the gearing (26) is connected to the rear-wheel drive shaft (6) through a connecting

element, e.g., a bolt (39) so as to be releasable therefrom, said connecting element being accessible through a closable opening (40) in the housing (10).

7. Drive assembly as defined in Claim 5 or Claim 6, characterized in that the rear-wheel drive shaft (6) is made in three sections, namely, a centre section (6') that is arranged within the housing (10) so as to be able to rotate therein, and two additional shaft sections (6a, 6b) that are connected, e.g., by a bolted connection, at one end to the centre section (6') so as to be releasable therefrom, the rear wheels (7) being attached to the outboard ends of these sections (6a, 6b).

8. Drive assembly as defined in one of the Claims 1 to 4, characterized in that the driven gear wheel (33) of the gearing is made in one piece with a hollow shaft (33a) that is installed in the housing (10) so as to be able to rotate therein, and is connected to the rear-wheel drive shaft (6), e.g., by a key (34) so as to be releasable therefrom.

9. Drive assembly as defined in one of the Claims 1 to 8, characterized in that an overload coupling (67, 68, 69) is incorporated in the drive train.

10. Drive assembly as defined in Claim 8 or Claim 9, characterized in that the hollow shaft (33) is connected to the rear-wheel drive shaft (6) through a flexible coupling (36), e.g., an rubber element, and/or through a friction clutch (37).

11. Drive assembly as defined in one of the Claims 1 to 10, characterized in that the gearing (26) is configured as multi-gear, change-speed gearing.

12. Drive assembly as defined in Claim 11, characterized in that in the case of a multi-stage gearing (26), the final stage (II) of the gearing is change-speed gearing.

13. Drive assembly as defined in Claim 11 or Claim 12, characterized in that a gear-shift

lever (66) that is mounted on the steering wheel (3) is associated with the change-speed gearing (26), said gear-shift lever being connected to a selector rod (49) of the change-speed gearing (26) by a cable or Bowden cable (61).

14. Drive assembly as defined in one of the Claims 1 to 13, characterized in that a tubular frame (2) is used as a chassis, and the housing (10) is secured to at least one chassis tube (2a, 2b) by at least one bolted clamp (42).

15. Drive assembly as defined in one of the Claims 1 to 13, characterized in that the chassis is a tubular frame (2); and in that the housing (10) partially fills the space between two parallel chassis tubes (2a, 2b) and is clamped between the two chassis tubes (2a, 2b) by at least one releasable clamp connection, e.g., a bolted clamp (43) or a strap clamp (44), so as to be removable therefrom.

16. Drive assembly as defined in one of the Claims 1 to 15, characterized in that the spur gearing (26) is configured with two stages and the driven gear wheel (29) of the first stage (I) of the gearing and the driving gear wheel (30) of the second stage (II) of the gearing are arranged on a common lay shaft or intermediate shaft (31).

17. Drive assembly as defined in Claim 16, characterized in that the gear wheels (27, 29) of the first stage (I) of the gearing are configured as gear wheels that can be replaced by gear wheels of various diameters so as to provide different reduction ratios.

18. Drive assembly as defined in Claim 17, characterized in that the part of the housing (10) that encloses the replaceable gear wheels is formed as a removable cover (32).

19. Drive assembly as defined in one of the Claims 16 to 18, characterized in that a balance weight (53) that is configured as a spur gear is mounted on the lay shaft (31) so as to be able to rotate thereon, said balance weight (53) being driven by a spur gear (54) of identical diameter that is mounted on the crank shaft (17).

20. Drive assembly as defined in one of the Claims 16 to 19, characterized in that a starter ring gear (55) that is driven by a starter motor (56) through interposed starter lay shaft gearing (57) is installed on the crank shaft or engine shaft (17, 17a).

21. Drive assembly as defined in one of the Claims 16 to 20, characterized in that a cooling-water pump (59) is arranged coaxially with the lay shaft (31) and driven by said lay shaft (31).

22. Go-kart with a drive assembly as defined in one of the Claims 1 to 21.